

Virginia Division of Consolidated Laboratory Services

TOTAL CYANIDE BY SEMI-AUTOMATED COLORIMETRY EPA 335.4 REVISION 1.0 AUGUST 1993					
Facility Name: _____ VELAP ID: _____					
Assessor Name: _____ Analyst Name: _____ Inspection Date: _____					
Relevant Aspect of Standards	Method Reference	Y	N	N/A	Comments
Records Examined: SOP Number/ Revision/ Date _____ Analyst: _____					
Sample ID: _____ Date of Sample Preparation: _____ Date of Analysis: _____					
Were samples collected in glass or plastic bottles?	8.1				
Were collection bottles previously cleaned and rinsed with reagent water?	8.1				
Were samples preserved to a pH \geq 12 with NaOH and cooled to 4°C at the time of collection?	8.3				
Were preserved samples held at 4°C for not longer than 14 days?	8.4				
Were LCRs determined initially, every 6 months, and whenever a significant change in instrumentation is made or observed?	9.2.2				
Did verifications of linearity consist of at least a blank and three standards measured to be within $\pm 10\%$ of initial calibration values?	9.2.2				
Were second-source QCS determined to be within $\pm 10\%$ of stated values?	9.2.3				
Were LRBs analyzed with every batch of samples?	9.3.1				
Were LFBs analyzed with every batch of samples to be either between 90 and 110% of expected value or within ± 3 standard deviations of historical data?	9.3.3				
Were mid-range IPCs analyzed following daily calibration, every tenth sample, and at the end of sample runs to be within $\pm 10\%$ of stated values?	9.3.4				
Were LFMs analyzed at a rate of 10% of samples to be between 90 and 110% recovery?	9.4.1				
Were LFMs fortified to be not less than four times the MDL?	9.4.1				
When LFMs fell outside the designated recovery, were the failures determined to be matrix not system related?	9.4.3				
Notes/Comments: 					

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Was distillation apparatus setup so that samples were distilled into 0.25 N NaOH?	11.1				
When samples contained NO ₃ and/or NO ₂ , were 0.2 g/ 50 mL sample portions of sulfamic acid added, and samples mixed for three minutes?	11.3				
Was 5 mL 18N H ₂ SO ₄ and 2 mL MgCl ₂ per 50mL sample added to samples through the air inlet?	11.4				
Were the solutions heated to boiling and refluxed for 1.5 hours?	11.5				
Was heat turned off after refluxing and airflow continued for at least 15 minutes to cool samples?	11.5				
Were all reagents pumped with 0.25N NaOH until stable baselines were obtained?	11.6				
Were all samples and QC samples in 0.25N NaOH?	11.7				
Notes/Comments:					